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UNITED STATES DISTRICT COURT
DISTRICT OF MAINE

ED FRIEDMAN,)
Plaintiff)
vs.) CIVIL ACTION
) Docket No. 2:20-cv-00237-JDL
CENTRAL MAINE POWER)
COMPANY,)
Defendant.)

REMOTE DEPOSITION OF ERIK S. ANDERSON, P.E.

Taken pursuant to notice dated January 13, 2022, on
January 26, 2022, commencing at 11:00 a.m., before
Julie G. Edgecomb, RMR, CRR, a Notary Public in and
for the State of Maine.

APPEARANCES:

For the Plaintiff: David Lanser, Esquire
For the Defendant: Christopher C. Taintor, Esquire

ALSO PRESENT: Ed Friedman
Tim Connolly, Esq.

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(Exhibits retained by counsel.)

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(The attorneys participating in this deposition
acknowledge that I am not physically present in the
deposition room and that I will be reporting this
deposition remotely. The parties and their counsel
consent to this arrangement and waive any objections
to this manner of reporting.)

(The deponent was administered the oath by the
Notary Public.)

ERIK S. ANDERSON, P.E., having been duly sworn by the
Notary Public, was examined and deposed as follows:

EXAMINATION

BY MR. TAINTOR:

Q Good morning again, Mr. Anderson. My name is Chris
Taintor, and I represent Central Maine Power in the
case brought by Ed Friedman in the United States
District Court in Maine.

And you understand we're here today to take your
deposition as an expert witness in connection with
that case?

A Yes, sir, I do.

Q Okay. And I know you have been through the deposition
process many times. I think I saw in one of your CVs,
as of a couple of years ago, you had given at least 85

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depositions; does that sound right?

A Yes, it does.

Q Okay. So I'm not going to spend a whole lot of time
on the rules of the road, but I guess the main thing I
want you to know is I don't think we'll be terribly
long today, but if you need to take a break, for any
reason, at any time, just let me know and we can do
that, okay?

A Thank you. I appreciate that.

Q Yeah. And most importantly, because I'm not an
electrical engineer, or even close to one, I'm bound
to ask you questions that don't make sense to you, for
any number of reasons, and I would just like to make
sure that we have a record in which you're only
answering questions you understand.

So if you could please let me know if I've asked
you a question that doesn't make sense to you or that
you don't understand, I would be grateful for that,
okay?

A I will do that.

Q Thanks. And we've marked a number of exhibits, and
most of them are things that you have seen before this
morning. I think there may be only one that you've
probably seen before but not in connection with this
case, and that's Exhibit 10.

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1 But let me start with Anderson Deposition Exhibit
 2 1, which is the notice to take your deposition. And I
 3 understand that you have produced a current CV; is
 4 that correct?
 5 **A Yes, I have.**
 6 **Q** Okay. And the documents I received this morning from
 7 Attorney Lanser would include all the documents you
 8 reviewed, referred to, or relied on in forming your
 9 opinions in the case?
 10 **A Yes, they are, with the exception of some of the legal**
 11 **documents I -- I believe are listed in my report, but**
 12 **I did not send those to --**
 13 **Q** Okay.
 14 **A -- counsel.**
 15 **Q** For example, the complaint and the -- there was an
 16 order on a motion to dismiss and that sort of thing?
 17 **A Yes, sir, that's correct.**
 18 **Q** Have you ever written any articles about the issues
 19 which are the subject of your report in this case?
 20 **A No, I have not authored any articles, no, sir.**
 21 **Q** Okay. And then there is a list of cases in which
 22 you've testified, and that's been marked as Exhibit
 23 12, and I think we know that your testimony in one of
 24 these Arizona cases involved issues -- high-voltage --
 25 or high-frequency voltage transients, correct?

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1 **A Yes, sir, that's correct.**
 2 **Q** Other than that case in the -- that was before, I
 3 think, the Arizona Public Service Commission --
 4 Arizona Corporation Commission, and that is Exhibit 6,
 5 have you ever provided testimony under oath on that
 6 particular issue in any other case?
 7 **A No, sir, I don't believe I have.**
 8 **Q** Okay. And with respect to Exhibit 6, which is your
 9 testimony on behalf of a gentleman named Warren
 10 Woodward in the state of Arizona, you understand that
 11 in that case, Mr. Woodward was, among other things,
 12 opposing the implementation of a smart meter system in
 13 the state of Arizona?
 14 **A I -- I think that was one of his concerns, yes.**
 15 **Q** And did you understand that your testimony was offered
 16 in support of that position?
 17 **A Yes.**
 18 **Q** And do you understand that that matter was resolved
 19 against Mr. Woodward?
 20 **A To a certain extent. I don't know precisely what the**
 21 **outcome of that case was.**
 22 **Q** So if we look at Exhibit 12, which you talked about a
 23 moment ago, with the exception of the Woodward case in
 24 Arizona, which looks like it's one that is sort of
 25 just above the midway point on the first page of

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1 Exhibit 12 talking about your testimony before the
 2 Arizona Corporation Commission, there's no other
 3 testimony here that involves the same issues that are
 4 the subject of your testimony in this -- or the
 5 subject of your report in this case, correct?
 6 **A Well, I don't know if that's precisely correct or not.**
 7 **I -- I have testified in many cases regarding**
 8 **transient voltages and, oh, power quality issues,**
 9 **failures of devices in conjunction with that, so I --**
 10 **I don't know that that's absolutely correct.**
 11 **Q** Okay. So when you're talking about voltage transients
 12 and cases in which you've testified, is that because
 13 in those cases, there has been a malfunction of the
 14 device or a failure of the device to operate because
 15 of power quality?
 16 **A That certainly is an issue, yes, and some of those**
 17 **cases do have to do with failures in conjunction with**
 18 **that, absolutely, yes.**
 19 (Tim Connolly, Esq., joined the Zoom.)
 20 BY MR. TAINTOR:
 21 **Q** Okay. Other than this case and the case before the
 22 Arizona Corporation Commission, have you testified in
 23 any other case where, to your knowledge, an individual
 24 was asserting, in an administrative or judicial
 25 proceeding, that power quality was having a negative

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1 impact or could have a negative impact on his or her
 2 health?
 3 **A I don't believe so, no.**
 4 **Q** When were you initially contacted to serve as an
 5 expert witness in this case?
 6 **A I think that's listed in my report, like the first**
 7 **paragraph. I believe it may have been in September or**
 8 **October of last year.**
 9 **Q** Okay. September 26th, 2021, and you were contacted
 10 directly by Mr. Friedman?
 11 **A That's my recollection, yes.**
 12 **Q** And did you, from that initial conversation, did you
 13 gain an understanding of what it was thought your
 14 testimony could offer to assist Mr. Friedman in
 15 prosecuting his lawsuit against Central Maine Power
 16 Company?
 17 **A Yes, he conveyed to me why he was contacting me and**
 18 **what he was -- well, what kind of help he was looking**
 19 **for, yes.**
 20 **Q** And -- and what was your understanding of your charge,
 21 if you will, or your assignment as an expert witness?
 22 **A I believe he was looking for someone to be able to**
 23 **discuss the -- the effects of the smart meter and its**
 24 **operation on the electrical system of his residence.**
 25 **Q** Okay. And I think this is very clear from your

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1 report, but I just want to be absolutely certain. You
 2 do not intend to offer any opinions in this case that
 3 exposure to radio frequency signal emitted by smart
 4 meters has ever caused or ever could cause harm to
 5 human beings, correct?
 6 **A I don't believe that that's what I was asked to do,**
 7 **and I -- I don't believe I will opine that in this**
 8 **case, no.**
 9 **Q** And that would be far beyond your area of expertise;
 10 would you agree?
 11 **A I'm not going to necessarily agree to that, no, but I**
 12 **was not asked to do that in this case.**
 13 **Q** So let me ask you then about Exhibit 10, which is the
 14 National Society of Professional Engineers Code of
 15 Ethics.
 16 You are a member of the National Society of
 17 Professional Engineers?
 18 **A Yes, sir, I am a member of the NSPE, absolutely.**
 19 **Q** And this -- this Code of Ethics is something you're
 20 familiar with?
 21 **A Yes, sir, it is.**
 22 **Q** Have you ever testified in any case anywhere about the
 23 effects on human health of high-frequency voltage
 24 transients?
 25 **A Not that I'm aware of, no.**

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1 **Q** Do you have any medical training of any kind?
 2 **A Ah, no, I don't think I've had any medical form of**
 3 **training, no.**
 4 **Q** In your -- let me ask you this. How much of your
 5 professional practice, say, over the course of the
 6 last five years, has involved forensic work?
 7 **A Oh, I would say 50 percent or better.**
 8 **Q** And what's the rest? How's that broken up?
 9 **A The rest is broken up with working with the**
 10 **manufacturing side of Anderson Engineering with**
 11 **Midwest Current Transformer and also dealing with**
 12 **manufacturers of industrial equipment and certifying**
 13 **their products per the National Fire Protection**
 14 **Association 79 and 70, along with UL508.**
 15 **Q** Can you repeat those acronyms for me?
 16 **A NFPA is the National Fire Protection Association.**
 17 **Q** Yeah.
 18 **A And they -- they have standards that they've created**
 19 **and one of them is NFPA 70, which is the National**
 20 **Electrical Code, and another is NFPA 79, which is**
 21 **industrial machinery, and then Underwriter**
 22 **Laboratories, UL, 508 is industrial cabinets, I**
 23 **believe.**
 24 **Q** So I think what you said is that you spent some --
 25 some part of your professional time certifying newly

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1 manufactured products for compliance with those NFPA
 2 and UL standards?
 3 **A Not just newly manufactured, but any industrial**
 4 **equipment, whether it's new or used or whatever**
 5 **vintage it is.**
 6 **Q** So what -- if -- if equipment is not new, what
 7 certification is required? Is that something that has
 8 to happen periodically?
 9 **A No, it's not, but it's -- it's becoming more and more**
 10 **the standard that equipment in industrial applications**
 11 **or industrial machinery be certified by either the**
 12 **nationally recognized testing laboratory or by a**
 13 **professional engineer or whomever the authority having**
 14 **jurisdiction will recognize.**
 15 **Q** Okay.
 16 **A So if you've got a piece of equipment that you've been**
 17 **using for decades, more than likely it was not**
 18 **certified or may have not been certified. The**
 19 **authority having jurisdiction can tell you that you**
 20 **have to have that certified in some way or another.**
 21 **Q** Gotcha, thank you. Your forensic work, I take it from
 22 your -- your website and your CV, consists primarily
 23 of fire and accident investigations?
 24 **A It has to do with fires to a certain degree, yeah. An**
 25 **economic loss is usually what triggers it, and that**

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1 **can be a flood or a fire or any type of economic loss**
 2 **to property. It also has to do with electrical**
 3 **accidents that occur to individuals -- personal**
 4 **injury, wrongful death.**
 5 So there -- there have been a number of instances
 6 where I've testified and discussed effects of
 7 electricity on the human body and how it can cause --
 8 it can cause damage to the human body, but in various
 9 ways, and cause -- also cause death.
 10 **Q** Those are primarily electrocution cases?
 11 **A They -- they can be electrocution cases. They also**
 12 **can be damage that has occurred to an individual that**
 13 **was in close proximity to an electrical discharge**
 14 **where there -- they sustained rather significant**
 15 **injuries due to the fields -- magnetic fields, the**
 16 **electric fields -- that they're in close proximity to.**
 17 Of course, there are instances where you have arc
 18 flash considerations and the -- the arc flash plasma,
 19 basically, is ejected out onto the individual where it
 20 causes burns and metal impregnation, things like that.
 21 **Q** All right.
 22 **A So there's various ways to be injured --**
 23 **Q** All right.
 24 **A -- by that.**
 25 **Q** Have you ever taken the position, either in a public

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1 forum or in consulting with users of -- of electrical
 2 power, that they should not have smart meters?
 3 **A No, not specifically.**
 4 **Q** Do you have a smart meter at your home?
 5 **A I more than likely do.**
 6 **Q** Have you been in contact with any of the other expert
 7 witnesses who have been designated by the plaintiff in
 8 this case?
 9 **A I don't believe so, no.**
 10 **Q** Do you know Dr. David Carpenter?
 11 **A I do not.**
 12 **Q** Do you know Kent Chamberlin?
 13 **A No, sir.**
 14 **Q** And there's another doctor, Heroux, H-e-r-o-u-x, do
 15 you know him?
 16 **A No.**
 17 **Q** Other than Mr. Friedman and his attorneys, have you
 18 spoken with anyone about your work in this case?
 19 **A Yes, sir, I have.**
 20 **Q** And who else have you spoken with?
 21 **A I've spoken with Paul Harding --**
 22 **Q** I'm sorry, who?
 23 **A -- and -- and Warren Woodward.**
 24 **Q** Who? What was the first name?
 25 **A Paul Harding.**

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1 **Q** And who's he?
 2 **A Paul Harding is an individual that I met when I was**
 3 **working on that other matter that you discussed, the**
 4 **Arizona Corporation Commission.**
 5 **Q** Okay.
 6 **A I have spoken with him, and -- and Warren Woodward**
 7 **similarly, when I was trying to get ahold of**
 8 **Mr. Harding.**
 9 **Q** Okay. Now, what was Mr. Harding's role in the Arizona
 10 case?
 11 **A Mr. Harding has equipment used for measuring the smart**
 12 **meter devices that are pertinent to this case.**
 13 **Q** So did you obtain some equipment from him?
 14 **A I did not. I -- I tested -- well, in the Arizona**
 15 **case, he was the one that supplied the equipment for**
 16 **the testing that I witnessed, and in this case, I**
 17 **actually did some further testing with Mr. Harding in**
 18 **regards to this case.**
 19 **Q** You did testing where?
 20 **A At Mr. Harding's residence.**
 21 **Q** And where is that?
 22 **A It's basically between Phoenix and Tucson in Arizona.**
 23 **Q** So what were you testing at Mr. Harding's residence?
 24 **A I had tested a GE I-210+ meter at Mr. Harding's**
 25 **residence.**

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1 **Q** And how did you -- how did you perform the testing,
 2 and what specific tests did you perform?
 3 **A What -- what we did was we connected the meter to his**
 4 **test stand setup and measured the -- measured the --**
 5 **the power -- or, well, measured the voltage waveforms**
 6 **coming off of it.**
 7 **Q** And is that the testing that -- is that testing
 8 reflected in your report in this case?
 9 **A No, it is not.**
 10 **Q** What did that testing reveal? If there was anything
 11 -- well, let me ask you generally, what did the
 12 testing reveal?
 13 **A The testing revealed that there was additive**
 14 **transients generated by the smart meter with its power**
 15 **supply.**
 16 **Q** Did you make notes of the testing?
 17 **A Yes, sir, I did.**
 18 **Q** Did you produce that material this morning?
 19 **A No, I did not.**
 20 **Q** I'm just going back to the notice of deposition, which
 21 is Deposition Exhibit 1, Paragraph 3 asked for all
 22 documents, including, but not limited to, any reports
 23 prepared or created by you in regard to this case.
 24 Do you think the results of that testing that you
 25 did with Mr. Harding would fall within that

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1 description?
 2 **A I don't know that specifically; it may.**
 3 **Q** Had you seen this deposition notice before today?
 4 **A I believe I was supplied with it. I don't know that I**
 5 **read it, other than I did look through the list and**
 6 **tried to comply with that list, yes.**
 7 **Q** Are there any other documents, besides the notes of
 8 the testing you performed at Mr. Harding's residence,
 9 that you created concerning this case which, so far as
 10 you know, have not been produced to CMP?
 11 **A Well, I have notes in my file that I did not produce.**
 12 **Q** Okay. How many pages of notes do you have?
 13 **A I don't know.**
 14 **Q** Are those handwritten or computerized?
 15 **A They're handwritten.**
 16 MR. TAINTOR: Okay. Dave, is there a dispute
 17 about the discoverability of all these notes?
 18 MR. LANSER: Well, I have not seen these notes
 19 either, so I don't anticipate a dispute, but maybe
 20 after this, if Mr. Anderson would send them to me and
 21 we can review them to see if there's a dispute. If
 22 that's all right with you, Chris?
 23 MR. TAINTOR: Yeah, or maybe during a break. I
 24 mean, I won't be terribly long today, but if he has
 25 the ability to send them off to you, you could -- we

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1 might just -- it might make it easier.
 2 THE DEPONENT: I -- I don't have a scanner.
 3 MR. TANTOR: Oh, okay, all right. Well, we'll
 4 -- we'll just deal with that, I guess, and I don't
 5 know whether this other information will create a
 6 reason to reconvene, hopefully not, but, you know, I
 7 may want to leave that option open if we get to that
 8 point.
 9 BY MR. TANTOR:
 10 Q Okay. So what relevance, if any, does the testing
 11 that you performed with Mr. Harding have to the
 12 opinions expressed in your report in this case?
 13 A **I think that they just help solidify those opinions.**
 14 **I don't -- they don't change the opinions.**
 15 Q And they solidify your opinion that having a smart
 16 meter -- well, tell me the -- rather than my try to
 17 articulate it, and probably poorly, why don't you have
 18 -- why don't you tell me the opinion that you believe
 19 the testing you did with Mr. Harding solidifies.
 20 A **Well, I -- I believe that it shows that the powering**
 21 **up of the smart meter and the switch mode power supply**
 22 **within it creates transients on the system.**
 23 Q Okay. Are transients created in a -- in a residential
 24 electrical system by devices other than smart meters?
 25 A **Yes, I believe they do.**

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1 Q And -- and what other devices cause that to occur?
 2 A **Well, certain appliances I would expect do, like**
 3 **possibly a refrigerator would be an appliance that**
 4 **would create transients.**
 5 Q Any other appliances you can think of?
 6 A **Well, any -- any other -- any other devices that may**
 7 **contain the switch mode power supply can have**
 8 **transients associated with it.**
 9 Q And do you know which appliances are likely to have or
 10 to contain switch mode power supplies?
 11 A **Typically electronics. I would expect monitors, video**
 12 **monitors, computers.**
 13 Q Anything else?
 14 A **Potentially air conditioning, heat pump that may also.**
 15 Q Anything else?
 16 A **Not that comes readily to mind at this time.**
 17 Q Okay, thanks. You mentioned Warren Woodward and Paul
 18 Harding. Was your -- am I correct in understanding
 19 that you spoke with Mr. Woodward only in order to
 20 connect with Mr. Harding?
 21 A **That's correct, yes.**
 22 Q Is Mr. Harding a professional engineer?
 23 A **I don't believe so, no.**
 24 Q Do you know what he does for a living?
 25 A **My understanding is that he works with individuals**

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1 **that are trying to clean up their power systems.**
 2 Q And what do you mean when you say clean up their power
 3 systems?
 4 A **Reduce the transients and harmonics on their wiring,**
 5 **their household, residential wiring.**
 6 Q Other than Mr. Wood -- Woodward and Mr. Harding, is
 7 there anyone else you have spoken with, again, leaving
 8 aside Mr. Friedman and his lawyers, anyone else you've
 9 spoken with about the case?
 10 A **I don't believe so, no.**
 11 Q Do you have your report accessible to you there
 12 Exhibit 2?
 13 A **Yes, I do.**
 14 Q Looking at Attachment 1, which is referred to in your
 15 report as documents that you've reviewed to assist you
 16 in formulating your opinions --
 17 A **Yes, sir.**
 18 Q -- let me ask you -- let me ask you first about
 19 Central Maine Power Company's answers to
 20 interrogatories, which is Exhibit 3, how did your
 21 review of those answers to interrogatories assist you
 22 with formulating your opinions in the case?
 23 A **That's No. 1, or objections and answers --**
 24 Q Yes.
 25 A **-- to plaintiff's interrog -- yeah.**

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1 Q Yeah, it's Exhibit 3.
 2 A **Oh, okay. Well, I -- I think that was mostly**
 3 **background knowledge, as I recall.**
 4 Q Okay.
 5 A **I'd have to pull it up to really give you a full**
 6 **detailed account of that, but it was mainly just to**
 7 **understand more about what was going on.**
 8 Q Okay. You know, why don't you go ahead and pull that
 9 up, actually, because I want to ask you a couple
 10 questions about it. Just let me --
 11 MR. LANSER: Chris, not to just to jump in here,
 12 but, Erik, just to clarify, the -- that ShareFile link
 13 that I forwarded to you is -- is where the exhibits
 14 are numbered as Chris is referring to them.
 15 THE DEPONENT: I see, okay.
 16 MR. LANSER: So pull that up if you do have it --
 17 THE DEPONENT: I will --
 18 MR. LANSER: -- rather than hunting down each
 19 individual document, just go off of that Share --
 20 ShareFile. Then we'll all be on the same page.
 21 MR. TANTOR: Right, and just let me know when
 22 you've found it.
 23 MR. LANSER: I can reforward it to you if you
 24 don't have it.
 25 THE DEPONENT: Oh, no, no, I've got it.

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1 MR. LANSER: Okay.

2 **A All right. Where did -- where did you want to go to?**

3 BY MR. TAINTOR:

4 **Q** So -- so in that Exhibit 3, I -- my -- my guess is

5 that the information that might have been relevant to

6 you is in the answer to Interrogatory No. 9, which

7 starts at the bottom of Page 6.

8 So I'm going to -- I'll refer you there and --

9 and ask you if that answer to interrogatory --

10 interrogatories informed your opinion in any way in

11 the case?

12 **A Not other than the response as given as how the smart**

13 **meter operates --**

14 **Q** Okay.

15 **A -- or what -- what some of its parameters are.**

16 **Q** So the information about the duty cycle of the CMP

17 smart meters was not particularly relevant to you in

18 forming your opinions?

19 **A Well, no, I mean, it's good information to have, it's**

20 **absolutely very good information to have, but it is --**

21 **it is part of my --**

22 **Q** All right.

23 **A -- conclusions, yes, yeah.**

24 **Q** And then the CMP power quality webpage, now I marked

25 that as -- I -- I marked these exhibits before I got

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1 your material from Dave this morning, so I -- the copy

2 of that that I have and I've marked as Exhibit 8 --

3 **A Yes, yes.**

4 **Q** -- I think that's -- I think that's identical to what

5 you've produced -- well, I think substantively it's

6 identical to what you've produced, but it's just in a

7 slightly different format, and this is from Central

8 Maine Power Company's power quality webpage.

9 What particular information in this document, if

10 any, is relevant to or informed your opinions in this

11 case?

12 **A Again, I think it's background information. It shows**

13 **that CMP is aware of, you know, issues involving**

14 **voltage fluctuation, switching transients -- switching**

15 **transients, power outages, what can cause them, what**

16 **to do about them --**

17 **Q** Okay.

18 **A -- things like that, how to, you know, mitigate that**

19 **possibly.**

20 **Q** Okay. Item No. 3 on Attachment 1 refers to Central

21 Maine Power Company's response to Friedman Data

22 Request No. 1. What is that document? Do you -- I

23 don't think I saw that in -- as an attachment to what

24 Dave sent me this morning, but I'll -- I'll check

25 again.

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1 **A I probably did not attach that. Let me see if I can**

2 **find it. What was the name of the document again?**

3 **Q** It's referred to as Central Maine Power Company

4 response to Friedman Data Request No. 1.

5 **A Right. I've got a document here, Central Maine Power**

6 **Company response dated September 13, 2012.**

7 **Q** Okay.

8 **A Response prepared by Barry Brown.**

9 **Q** Lane -- Laney Brown maybe?

10 **A Or Lane -- sorry, yeah, Laney, that's correct.**

11 MR. TAINTOR: Dave, do you remember -- do you

12 know if you sent me that document this morning?

13 MR. LANSER: I'm not sure if that's included in

14 there. I'm trying to pull up --

15 **A I don't -- I don't -- I would not think that that is.**

16 **That -- that is a document that basically lays out the**

17 **cut sheets for the various meters.**

18 BY MR. TAINTOR:

19 **Q** What's -- what's a cut sheet?

20 **A It's basically a description of the meter and its**

21 **functions -- functionality, performance --**

22 **Q** Okay.

23 **A -- power, physical, environmental, report events,**

24 **alarms, things like that, for the -- for the meters**

25 **and the SecureMesh system.**

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1 **Q** Okay. Did that document inform your opinions in any

2 way in this case?

3 **A Yes, that document basically gave me information as to**

4 **what types of meters are in use or --**

5 **Q** Okay.

6 **A -- expected to be in use, yes, and -- and the mesh**

7 **system, also, the communication system.**

8 **Q** Was there any testing you performed, other than the

9 testing that you did with Mr. Harding, that is not

10 described in your report?

11 **A I -- I don't believe so.**

12 **Q** Was there a particular reason that you didn't mention

13 the testing that you did with Mr. Harding in your

14 report?

15 **A Yeah, I -- I did not have the meter.**

16 **Q** I'm sorry?

17 **A I didn't have a meter to test.**

18 **Q** I'm sorry, I must have mis -- misunderstood you or I

19 misspoke.

20 You did -- you did testing with Mr. Harding,

21 right?

22 **A Yes, sir, yes.**

23 **Q** And you didn't mention that in your report, yeah.

24 **A That's because I wrote the report before I did the**

25 **testing.**

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1 Q I see, okay, gotcha. I take it that you have not
 2 reviewed the field studies of Central Maine Power
 3 Company's meters that were performed either by
 4 Exponent or on behalf of the Office of the Public
 5 Advocate of the State of Maine?
 6 A **Not that I recall, no.**
 7 Q Did you author all of Anderson Deposition Exhibit 2,
 8 your report?
 9 A **Yes, I -- I did. Of course, there was some input from**
 10 **counsel and Mr. Friedman as we discussed it, but, yes,**
 11 **I did.**
 12 Q Is there any particular language in the report that
 13 you believe was supplied to you by other persons?
 14 A **Not specifically, but there -- there was some**
 15 **discussion about the language. I -- I don't profess**
 16 **to be the best writer in the world, and I -- I have no**
 17 **problem talking to others about different ways to**
 18 **phrase things and things like that, but I -- I**
 19 **certainly am open to other ways to express things.**
 20 Q Are there any particular passages in your report that
 21 you can identify as having been changed by -- by
 22 reason of your communicating with either Mr. Friedman
 23 or his counsel?
 24 A **Well, there were portions of the report that were**
 25 **discuss -- that we discussed about that would seem to**

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1 **be better if it was fleshed out a little bit more, and**
 2 **then with some of the -- some of the citing of certain**
 3 **things and the -- the formatting for that, so some of**
 4 **those things were changed. But for the most part, the**
 5 **report are my thoughts.**
 6 Q Okay. Now, and I understand it's certainly reasonable
 7 for a lawyer to say or for a client to say, gee, I,
 8 you know, I think it's important for you to emphasize
 9 this more than you have.
 10 But what I'm trying to get at is whether there is
 11 particular language in your report that you believe
 12 comes from or came from someone else?
 13 A **Well, I'm sure there are certain instances that there**
 14 **may be more from other parties than other -- you know,**
 15 **but, again, I -- I am very open to that type of thing,**
 16 **and I stand by the report. I have no issues with any**
 17 **of the language in it, and I believe it speaks for**
 18 **itself.**
 19 Q Okay, and -- and I get that. I'm just trying to
 20 understand if there -- if there is any passage in the
 21 report, or multiple passages in the report, where you
 22 believe -- where you can specifically identify that
 23 the language itself was actually provided to you by
 24 someone else?
 25 A **I don't know that I can specifically do that. There**

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1 **were certainly passages in the report that were**
 2 **mentioned or that were thought could be phrased in**
 3 **different ways throughout the report, basically. I**
 4 **mean, it started out as a very rough draft when I**
 5 **first presented it, and it -- it had been totally**
 6 **changed by the time it was finally done.**
 7 Q Let me ask you about Footnote 8 in the report.
 8 A **All right, let me --**
 9 Q Sure.
 10 A **-- pull that up. Yes, sir.**
 11 Q Have you reviewed the -- the documents cited in that
 12 footnote?
 13 A **Only to a limited extent, yes.**
 14 Q To what extent?
 15 A **Well, that basically what their decision was, what was**
 16 **ruled there in their decision.**
 17 Q Is the language in Footnote 8 yours?
 18 A **No, sir, it's not.**
 19 Q Do you have any information about what the court
 20 decision cited in Footnote 8 said about the connection
 21 between exposure to RF signal and cancer?
 22 A **I don't think I specifically know that, no.**
 23 Q So if you stay with your report for a moment, I want
 24 to look -- ask you about the analysis and discussion
 25 section, which starts at the bottom of Page 3.

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1 A **Yes, sir.**
 2 Q And so this says smart meters create intense exposure
 3 to pulsed radio frequencies in a few ways. RF
 4 antennas are embedded within the smart meter to
 5 transmit data usage to utility companies and/or
 6 communicate with other smart meters or other smart
 7 devices like home thermostats.
 8 Was it your intention to convey in those two
 9 sentences that the transmission of data from a smart
 10 meter to the utility company or to other smart meters
 11 or other smart devices would create an intense
 12 exposure to pulsed radio frequencies in a typical
 13 consumer?
 14 A **I was -- I -- my -- my intent there was to convey that**
 15 **that is a potential, yes, that they can create intense**
 16 **exposure to pulsed radio frequencies.**
 17 Q Not to parse words too much, but the first sentence
 18 doesn't say smart meters can create intense exposure,
 19 it says smart meters do -- well, it says smart meters
 20 create intense exposure --
 21 A **Yes.**
 22 Q -- to pulsed radio frequencies in a few ways, and then
 23 it starts giving some examples of how smart meters do
 24 that, correct?
 25 A **That's correct, yes, sir.**

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1 Q And one of the ways that you cited as an example was
 2 by the transmission of data from the smart meter to
 3 the utility company or to other smart meters, correct?
 4 A Yes, sir, I do.
 5 Q Under what condition -- or what conditions would need
 6 to occur for that communication to create intense
 7 exposure to pulsed radio frequencies in a human being?
 8 A Well, I -- I think it has to do with how far away you
 9 are from the meter and how -- how those frequencies
 10 interact with your body and how susceptible you are to
 11 those frequencies.
 12 Q Would you -- would a -- would an individual have to
 13 have his or her face basically pressed against the
 14 smart meter in order for that scenario to create an
 15 intense exposure to radio frequencies?
 16 A Well, I would expect that would be one way to do it,
 17 but I don't believe you have to be quite that close,
 18 particularly if you're sensitive to it or if you have
 19 adverse reactions to those RF frequencies.
 20 Q How close do you think you would have to be to have an
 21 intense exposure based on that scenario?
 22 A I -- I think that would depend on the individual to a
 23 certain extent. I don't know that I can quantify that
 24 for you.
 25 Q Did anyone ever tell you that Mr. Friedman was

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1 electrosensitive or -- or hypersensitive to RF signal?
 2 A I don't believe so, no.
 3 Q Then at the top of the next page, Page 4, you said the
 4 meters' various radio frequencies emitted by these
 5 antennas also conduct through the home electrical
 6 wiring and that -- you go on to explain that later on
 7 in your report, correct?
 8 A Yes, sir, I do.
 9 Q And then you say RF wire conducted frequencies come
 10 also from the conversion process from alternating
 11 current to direct current handled by the switch mode
 12 power supply.
 13 So I guess I'm just trying to understand, and
 14 this is one of those topics where, because I'm not an
 15 electrical engineer, I really come at this from a
 16 position of ignorance, is the -- the mechanism
 17 described in the last sentence about the conversion
 18 process from AC to DC a separate source of exposure,
 19 or is that a process that, in your view, heightens the
 20 exposure that occurs from other sources?
 21 A My -- that -- that kind of sounds like two questions.
 22 Q Okay.
 23 A The -- the first one, yes, the -- the conversion from
 24 AC to DC by the switch mode power supply creates
 25 transients on the system and that those transients are

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1 cumulative on the rest of the system. So I'm not
 2 exactly sure what the answer to your questions are,
 3 but I think they would basically both be yes.
 4 Q Okay. Well, what do you mean when you say that the
 5 transients are cumulative?
 6 A Well, you asked about the other devices on the system,
 7 and if there are other devices on the system that
 8 create transients, then the transients that are
 9 generated by the switch mode power supply would be
 10 cumulative to that.
 11 Q I see. Now just flip back to Page 2 of your report.
 12 A Okay.
 13 Q At the top of the page, you see there are six numbers?
 14 A Yes, sir.
 15 Q Number 3 says the RF electromagnetic fields/waves
 16 produced by the electric smart meters used by CMP are
 17 not attenuated as they travel throughout the
 18 electrical distribution network of the residence the
 19 meter is controlling.
 20 So, again, just so that I can understand what
 21 you're saying, when you say the -- the waves are not
 22 attenuated, are you saying that the -- that the
 23 transients remain the same throughout the system?
 24 A Correct, the -- the transients that are generated are
 25 not reduced throughout the electrical system as they

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1 travel through the electrical conductors, the copper
 2 conductors. There is very little loss in the copper.
 3 The -- the transmitted energy that is transmitted
 4 by the antenna falls off by the square of the radius
 5 and the square of the distance away from it, although
 6 it can be picked up by the -- by the wiring in the
 7 house and then as a passive antenna and follow it
 8 along and that -- that RF higher frequency from the
 9 transmission of the data can be found in other places
 10 in the house that are much -- much reduced intensity.
 11 But the transients that are generated by the
 12 switch mode power supply are definitely transmitted
 13 throughout -- throughout the house and they are not
 14 attenuated or they are not reduced or -- because of
 15 that --
 16 Q Okay.
 17 A -- because the -- the electrical wiring that they're
 18 on is very -- has a very low loss.
 19 Q Gotcha, thank you. If we go back to Page 4 of your
 20 report under the heading RF emissions from the
 21 transmitting -- transmitting antennas --
 22 A Yes, sir.
 23 Q -- in the middle of that paragraph, you made the
 24 statement that emissions from CMP meters can occur
 25 often up to 190,000 times a day, and you cite a Sage

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1 Associates report in support of that statement.
 2 Do you know whether that 190,000 times per day
 3 figure actually appears in the Sage Associates report?
 4 **A I don't recall that specifically, no.**
 5 **Q** I'll tell you this, so the Sage Associates report is
 6 Exhibit 4, and I ran a search to try to find that
 7 figure and couldn't find it, but that may just be my
 8 problem.
 9 Do you happen to know or did you make any notes
 10 about where that figure appears?
 11 **A I don't recall that specifically.**
 12 **Q** What --
 13 **A I remember read -- I remember reading that somewhere,**
 14 **but I -- I don't specifically recall where I saw that.**
 15 **Q** Do you think that's one of the sentences in your
 16 report that might have been provided by someone else?
 17 **A I don't believe that specifically. I -- I remember**
 18 **seeing that figure in a report at some point in time,**
 19 **but I don't recall it off the top of my head right**
 20 **now.**
 21 **Q** Okay.
 22 **A And it may have not been cited from that report; it**
 23 **may have been a different report. I -- I'm not**
 24 **specifically sure.**
 25 I did -- I did look at that Sage report recently,
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1 and I -- I agree with you, I don't necessarily recall
 2 seeing it in that report. It may have come from a
 3 different report.
 4 **Q** Are you -- before your involvement in this case, were
 5 you familiar with Sage Associates?
 6 **A No, sir, I was not.**
 7 **Q** How did you come to be familiar with Sage Associates
 8 and with this report in particular?
 9 **A I believe the first time I saw that was when I was**
 10 **working for the Children's Health Defense.**
 11 **Q** Where -- and where were you working -- well, let me
 12 ask you this.
 13 Where and in what regard -- in what connection
 14 were you working for Children's Health Defense?
 15 **A I was asked to produce a report or testimony in an**
 16 **amicus brief that they were filing.**
 17 **Q** And was that in connection with the -- the lawsuit
 18 that we talked about before, which is cited in
 19 Footnote 8 of your report?
 20 **A Yes, sir, it is.**
 21 **Q** Do you have any information about who actually
 22 authored Exhibit 4, the Sage Associates report, what
 23 -- what individual or individuals were responsible for
 24 its content?
 25 **A Not other than what I saw from their website. I -- I**
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1 **don't know if there's an individual that authored that**
 2 **or not. I don't -- I certainly don't know the**
 3 **individual who did, if they did.**
 4 **Q** Did you rely on the Sage Associates report -- let me
 5 -- let me ask you this. Withdraw that question.
 6 I see --
 7 THE DEPONENT: Before you start, Chris, can we
 8 take a five-minute break?
 9 MR. TAINTOR: Absolutely. It's 12:01. We'll
 10 come back in -- yeah, come back in about five or six
 11 minutes?
 12 THE DEPONENT: Yeah.
 13 MR. TAINTOR: All right. Thanks.
 14 THE DEPONENT: Thank you.
 15 MR. TAINTOR: Okay.
 16 (A break was taken from 12:03 p.m. to 12:09 p.m.)
 17 BY MR. TAINTOR:
 18 **Q** All right. Mr. Anderson, are you okay to go?
 19 **A Yes, I am, yes.**
 20 **Q** Okay. So I don't remember exactly where we were, but
 21 let me go back first to the -- the issue with
 22 Mr. Harding.
 23 What was it that prompted you, after you had
 24 created your report in this case, to connect with
 25 Mr. Harding to perform further testing?
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1 **A My understanding that he had the best setup that I was**
 2 **aware of to do the testing.**
 3 **Q** Okay. And you got that understanding from your prior
 4 work in Arizona or from somewhere else?
 5 **A No, from my prior work in Arizona.**
 6 **Q** So the testing that's described at Page 7 of your
 7 report was performed, obviously, before the report was
 8 created, but on Landis+Gyr, or Gyr, G-y-r, meter. And
 9 was that the same kind of meter that you used in the
 10 testing with the gentleman Paul Harding in Arizona?
 11 **A Yes, the -- the testing that's described there is the**
 12 **testing that I had done with Mr. Harding, yes.**
 13 **Q** I'm sorry, now I'm really confused. I -- I thought
 14 you said -- so the -- oh, I see, okay. The test --
 15 the testing that's described on Page 7 of your report
 16 is testing that you had done when you were working on
 17 the Arizona case some years before this.
 18 **A That's correct.**
 19 **Q** And when you went back to Arizona after you generated
 20 this report to do the testing over again or slightly
 21 differently?
 22 **A I'm actually in Arizona, so I don't have to leave --**
 23 **Q** Okay.
 24 **A -- if I didn't want to.**
 25 **Q** I'm sorry, I thought you were in Minnesota. You're
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1 all over the place.
 2 **A Our home office is in Minnesota, that's correct, yes,**
 3 **but it's warmer here in Arizona.**
 4 **Q** Yeah, God bless you, and I see you have the -- the rug
 5 behind you, so --
 6 **A Right, right.**
 7 **Q** Anyway, so -- but -- but leaving that --
 8 **A And God bless you, also.**
 9 **Q** Listen, I'm cold here, so --
 10 **A Right.**
 11 **Q** -- I'm -- I'm envious.
 12 But the -- regardless of whether you had to
 13 travel or not, you had done this testing with
 14 Mr. Harding some years ago, and that's the testing
 15 that you did that's cited at Page 7 of your report,
 16 but after the report was completed, you found
 17 Mr. Harding again and performed the same or similar
 18 testing?
 19 **A Yes, sir, that's correct.**
 20 **Q** And so the more recent testing that you've talked
 21 about is the testing that you may have notes for or
 22 you do have notes for, but you can't scan them today,
 23 and we'll get hopefully at some later time.
 24 Are there notes or records of the testing you did
 25 previously with Mr. Harding that's referred to in your

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1 report?
 2 **A Yes, sir, there are.**
 3 **Q** And just to be clear, I know the answer to this, I
 4 think, but those haven't been provided either,
 5 correct?
 6 **A They have not.**
 7 **Q** So you -- you told me that you were enlisted to assist
 8 with an amicus brief in the Children's Health De --
 9 Children's Health Defense case, which was essentially
 10 a challenge to an FCC action, correct?
 11 **A You would know more about that than I.**
 12 **Q** Okay. And in connection with that -- in connection
 13 with the work you did on that case, you were first
 14 alerted to the existence of the Sage Associates
 15 report, which is Exhibit 4, correct?
 16 **A Yes, sir.**
 17 **Q** Did you -- did you work with Mr. Friedman on that
 18 Children's Health Defense case?
 19 **A No, sir, I was not aware of Mr. Friedman at that time.**
 20 **Q** Was your first contact with him the September 26th,
 21 2021 contact referred to in your report?
 22 **A Yes, sir.**
 23 **Q** Did you work with Cindy Sage in the Children's Health
 24 Defense case?
 25 **A Not that I recall. That name does not ring a bell.**

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1 (Dogs barking.)
 2 BY MR. TAINTOR:
 3 **Q** Is that -- is that Mr. Friedman's previously perfectly
 4 behaved dog doing that?
 5 **A That's my dogs.**
 6 **Q** Oh.
 7 **A I -- I apologize.**
 8 **Q** That's fine, I'm just kidding.
 9 **A That's what happens when you work from home. Whenever**
 10 **somebody walks by the curtain or something like that,**
 11 **the dogs go crazy.**
 12 **Q** It's all good.
 13 **A Thank you, I apologize.**
 14 **Q** So the -- who -- who brought you into the Children's
 15 Health Defense case?
 16 **A I was originally contacted by a woman by the name of**
 17 **Dafna. I don't necessarily recall her last name at**
 18 **this point.**
 19 **Q** Gotcha. And, I'm sorry, maybe I -- I'm not sure if I
 20 asked you this question before we had the
 21 interruption, did you work with Cindy Sage in the --
 22 in the Children's Health Defense case?
 23 **A I don't -- I don't recall ever speaking with an**
 24 **individual by that name.**
 25 **Q** The Sage Associates report, which is Exhibit 4, is

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1 cited twice in your report in Footnote 3 and
 2 Footnote 7.
 3 Footnote 3 is after the sentence that we talked
 4 about before, which says that emissions from smart
 5 meters are intense and can occur often, up to 190,000
 6 times a day, and it's also cited for the proposition
 7 that pulsed RF emissions from smart meters exceed the
 8 absolute energy output limits stated in the FCC
 9 guidelines, if the emissions are not averaged over a
 10 30-minute exposure as prescribed by those guidelines.
 11 Was it suggested to you by anyone that the Sage
 12 Associates report ought to be cited in support of
 13 either of those propositions?
 14 **A I don't recall that specifically, but, you know, the**
 15 **-- the -- No. 8, the cite No. 8, that was -- that --**
 16 **that came out of the Children's Health Defense, which**
 17 **I believe I -- I did read at one point in time, but**
 18 **that I believe is where that was generated from.**
 19 And, also, some of this information about the
 20 190,000 times per day could have been part of that
 21 testimony or report or amicus brief that was
 22 generated.
 23 **Q** Okay. So to go back to my question, I think you said
 24 that you don't know whether the references to Sage
 25 Associates in Footnotes 3 and 7 were included at the

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1 suggestion or direction of anyone else; is that
 2 correct?
 3 **A I think they were part of whatever report was produced**
 4 **with the Children's Health Defense.**
 5 **Q** Okay. That -- that -- so that's a little bit --
 6 **A And then that was a -- that was a collaborative**
 7 **effort, clearly, yeah.**
 8 **Q** A collaborative effort with whom?
 9 **A With the Children's Health Defense and their attorneys**
 10 **and myself.**
 11 **Q** Okay. But what I'm trying to get at now is who made
 12 the decision that the Sage Associates report ought to
 13 be cited at Footnotes 3 and 7 of your report, which is
 14 Deposition Exhibit 2?
 15 **A Oh, I'm sure I did, or at least I approved it.**
 16 **Q** Okay.
 17 **A I mean, there -- there were various iterations of**
 18 **these reports, but, yeah, I -- I proofread it --**
 19 **Q** Okay. Did --
 20 **A -- approved of it, yes.**
 21 **Q** Did someone else actually draft large portions of the
 22 report to be proofread by you?
 23 **A Not necessarily, no, I -- I started out with a draft**
 24 **and then we discussed it and refined it.**
 25 **Q** Right. A moment ago, though, you talked about
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1 proofreading something, and what I want to understand
 2 is whether there were large parts, or maybe not even
 3 large parts, but substantial parts of Exhibit 2 which
 4 were drafted by someone other than yourself to be
 5 proofread by you?
 6 **A Not necessarily, no. I -- I did the majority of the**
 7 **drafting, and then there were changes made in the**
 8 **wording and the formatting of it, and then as that**
 9 **occurred, I would go through those and make edits and**
 10 **things like that --**
 11 **Q** Okay.
 12 **A -- go from there, until it got to a point where we**
 13 **were all comfortable with it --**
 14 **Q** But --
 15 **A -- or I was comfortable with it and they had it in a**
 16 **format that they thought would be acceptable to them.**
 17 **I mean, like these cites, I -- I'm not the best at**
 18 **writing cites, I don't typically cite a lot of**
 19 **documents in my reports, but others do.**
 20 **Q** Hm-hmm.
 21 **A You know, I have -- I don't have a problem with that.**
 22 **Q** And I appreciate that, and I'm just really trying to
 23 understand how much of this is your work and how much
 24 of it is someone else's, and so I'm really trying to
 25 understand whether you were, for example, sending
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1 documents to Mr. Friedman or to his counsel and they
 2 were then coming back with new language in them, not
 3 just formatting and citations, but actually new
 4 substantive language?
 5 **A No, I don't think there's any new substantive**
 6 **language, no.**
 7 **Q** Okay. Did you rely on the Sage Associates report for
 8 any propositions other than those for which there are
 9 citations in Footnotes 3 and 7?
 10 **A I don't know that specifically. Basically, I got from**
 11 **the Sage report through Sage & Associates was that**
 12 **they found, you know, the RF signal and the -- and**
 13 **where they found it and the magnitude of it and, you**
 14 **know, other various facts, information that they**
 15 **developed during their testing. I mean, there --**
 16 **there's a number of things in there, but they don't**
 17 **all obviously pertain to my expressed opinions.**
 18 **Q** And did Sage Associates actually perform any testing?
 19 **A All I know is what I saw in their report, so I don't**
 20 **know specifically if they performed the testing or**
 21 **not.**
 22 **Q** Well --
 23 **A I don't -- I can't tell you who performed the testing**
 24 **unless it's given in the report.**
 25 **Q** Are there any test results reported in the Sage
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1 Associates report, or is it just a model of what might
 2 happen?
 3 **A I know there was some modeling in there. I don't know**
 4 **specifically if they actually did do any testing. I**
 5 **thought there may have been some testing done within**
 6 **the vicinity, but I -- I don't recall if they were the**
 7 **ones that had described the meters that they used or**
 8 **not. I'd have to look at it again.**
 9 **Q** Yeah, why don't you do that. I'm just trying to
 10 understand, I -- I think you told me a moment ago that
 11 you were aware of some testing results -- or some test
 12 results for the Sage Associates report, and I'd just
 13 like you to take a look at Exhibit 4 and tell me where
 14 those test results appear and how they influenced your
 15 report, if at all.
 16 **A Well, it does look like this does show that it is**
 17 **computer modeling.**
 18 **Q** So there's no -- there are no test results reflected
 19 in Exhibit 4?
 20 **A Well, I don't know if there are test results in**
 21 **Exhibit 4, not necessarily. I mean, there's obviously**
 22 **data given, but there -- they may have done all**
 23 **computer modeling. That's certainly very possible**
 24 **here.**
 25 **Q** Is the Sage Associates report peer-reviewed?
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1 **A I don't know that.**

2 **Q** When you're, as a general proposition, deciding what
3 sort of material it is reasonable for you to rely on
4 in formulating opinions that you're going to testify
5 to under oath in court, do you -- what consideration,
6 if any, do you give to whether or not a resource has
7 been peer-reviewed?

8 **A I don't know that I specifically look towards -- to**
9 **finding whether it's peer-reviewed or not.**

10 **Q** So that's not particularly relevant in -- in your
11 mind?

12 **A Well, it certainly has relevancy, sure, but I don't**
13 **know that I specifically look to a report to find out**
14 **if it's peer-reviewed or not or that I try to**
15 **determine whether it's peer-reviewed or not.**

16 **Q** What's the function of peer-review, as you understand
17 it?

18 **A I suppose it would give others an opportunity to**
19 **determine whether they agree with it or not.**

20 **Q** Is it also to, in part, to test the validity and
21 reliability of the conclusions set out in a -- in a
22 study?

23 **A I would expect it is, yes.**

24 **Q** When you're deciding what weight, if any, to give a
25 resource when you're going to rely on it as any part

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1 of the basis for an opinion that you might offer in
2 court, what consideration, if any, do you give to the
3 credentials and qualifications of the person who
4 created the document?

5 **A I don't know that I've specifically looked at that.**

6 **Q** So just to be clear, the -- as far as the Sage
7 Associates report is concerned, No. 1, you don't know
8 who authored it and what their qualifications are,
9 and, No. 2, you don't know whether it was peer-
10 reviewed, correct?

11 **A I'm not aware of those things, no.**

12 **Q** Do you know whether that -- that report has been
13 subjected to professional critique in the electric
14 power industry?

15 **A I am not aware of that, no.**

16 **Q** Have you looked into that at all?

17 **A I have not.**

18 **Q** Are you familiar with the Electric Power Research
19 Institute?

20 **A I don't recall, no.**

21 **Q** So when you cited the Sage Associates report for the
22 proposition that pulsed RF emissions exceed the
23 absolute energy output limits as stated in the FCC
24 guidelines if the emissions are not averaged over a
25 30-minute exposure, you were relying, to be clear, you

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1 were relying for that statement, at least in part, on
2 the Sage Associates report, correct?

3 **A It's -- it's very possible, yes. I don't recall that**
4 **specifically, but I -- I don't know that I rely on**
5 **that -- solely on that, but I don't recall**
6 **specifically if there were other instances where I --**

7 **Q** Well, you cited --

8 **A -- saw that.**

9 **Q** You cited the Sage Associates report there. So do you
10 have any understanding of what assumptions the authors
11 of the Sage Associates report made when projecting
12 that pulsed RF emissions would exceed absolute energy
13 output limits stated in the FCC guidelines?

14 **A Not other than what's given in the report.**

15 **Q** Do you know what assumptions were made regarding the
16 duty cycle of the meters?

17 **A Again, not other than what is given in the report.**

18 **Q** And what --

19 **A I mean, I --**

20 **Q** What --

21 **A -- believe there was some cite to that.**

22 **Q** What -- what --

23 **A There were some data given about that.**

24 **Q** What -- what were the assumptions made by Sage
25 Associates in the report regarding the duty cycle of

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1 the meters?

2 **A Well, I think we'd have to look at that, but I believe**
3 **there were different duty cycles potentially.**

4 **Q** Wasn't the assumption a continuous 24-hour duty cycle?

5 **A I believe that may have been one of the assumptions,**
6 **yes --**

7 **Q** Were there any other --

8 **A -- as part of the report. What's that?**

9 **Q** Nothing, thanks. Do you know what assumptions were
10 made in the Sage report regarding reflection
11 percentages?

12 **A Not without looking at it, no. There were some things**
13 **between 60 percent, a hundred percent, a thousand**
14 **percent, 2,000 percent, that type of thing I -- I**
15 **recall.**

16 **Q** Do you know -- have you ever reviewed the studies
17 cited by Sage as the basis for the 1,000- and 2,000-
18 percent reflection assumptions?

19 **A I have not looked at those studies.**

20 **Q** At Page 4 of your report, under the heading RF
21 emissions from the transmitting antennas, you wrote
22 from my experience and testing done by others, these
23 meters, meaning smart meters, transmit more times than
24 the electric companies report.

25 What is your experience that you're referring to

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1 in that sentence?

2 **A The testing that I did in regards to the Arizona case.**

3 **Q** So -- and that's the -- the testing described at
4 Page 7 of your report that we don't have the notes
5 for, correct?

6 **A Yes, sir, Page 7.**

7 **Q** And you're saying that when you did that testing in
8 Arizona, that testing showed that the smart meters you
9 tested transmitted more times than the electric
10 companies report?

11 **A That was my understanding, yes.**

12 **Q** And would that be reflected in a report that you filed
13 in connection with the Arizona case?

14 **A I don't know that that was specifically brought up in**
15 **that case.**

16 **Q** Actually, I guess we have that, so why don't we just
17 take a look at it. So I think that's Exhibit 6,
18 Deposition Exhibit 6; do you have that?

19 **A Yes, sir, I do.**

20 **Q** So does the report that you submitted or the direct
21 testimony you submitted to the Arizona Corporation
22 Commission say anything about the transmission of the
23 smart meters occurring more often than the electric
24 companies report?

25 **A I don't believe it does, no.**

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1 **Q** Do you know whether you testified in any form other
2 than Exhibit 6 in the Arizona case?

3 **A What do you mean by that?**

4 **Q** I'm sorry, did you testify live in person?

5 **A Yes, sir, I did.**

6 **Q** Did you submit other written testimony besides
7 Exhibit 6 in the Arizona case?

8 **A Not that I'm aware of.**

9 **Q** And so I just want to understand how it was that your
10 testing in Arizona could have established that the
11 meters in use there transmitted more times than the
12 electric companies reported.

13 Were you actually monitoring or did you actually
14 monitor transmissions from a smart meter that was in
15 use at a residence in connection with the Arizona
16 case?

17 **A Yes, sir, I did.**

18 **Q** And so your records of that work would show that you
19 determined that the transmissions you measured and
20 observed actually exceeded those that were reported by
21 the electric company in Arizona; am I understanding
22 you correctly?

23 **A The -- the testing that I did showed that the meter**
24 **transmitted regularly. It -- it was cycling on and**
25 **off as we were testing it, so that's -- that's my**

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1 **recollection of it.**

2 **Q** And I want to -- and maybe I'm just not understanding
3 this, and that's my fault, obviously not yours, I want
4 to distinguish between your observation and
5 measurement versus testing.

6 I assume that if you're testing a smart meter,
7 you've got, you know, for example, a -- I think you
8 had it set up for your testing in Exhibit 6, right?

9 **A Yes.**

10 **Q** And it shows -- it shows you've got the smart meter
11 hooked up in a basement somewhere; is that right?

12 **A Yes, that -- that is an overall view of the test**
13 **setup.**

14 **Q** Okay. And is that a -- was that an operating smart
15 meter in the sense that it was a meter that had been
16 installed by a power company to measure electricity
17 usage in a home, or was that a -- or was that a device
18 that you and Mr. Harding had that was not actually
19 measuring usage in a home?

20 **A This was the device under test or the unit under test.**
21 **It was not at that time something that was installed**
22 **by the power company.**

23 **Q** So how could you measure -- how could you determine,
24 based on that test, that that meter was transmitting
25 more times than the electrical company reported that

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1 it would or should?

2 **A Well, during that testing, the meter cycled regularly,**
3 **and it's my understanding that it wouldn't -- it**
4 **wouldn't cycle that often according to the power**
5 **company.**

6 **Q** Okay.

7 **A It just showed to me that it cycled repeatedly.**

8 **Q** Okay. And -- and for my edification, when you say it
9 cycled, what was it doing?

10 **A It was -- it was transmitting --**

11 **Q** Transmitting --

12 **A -- information.**

13 **Q** Transmitting to what?

14 **A To whatever it could find or just transmitting.**

15 **Q** You also said that, in addition to your experience,
16 you were aware of testing done by others which showed
17 that meters transmit more times than the electric
18 companies report.

19 What was that testing done by others? Who -- who
20 were the others who did that testing?

21 **A I believe that was given in some of the reports that I**
22 **had read in regards to this assumption. I don't know**
23 **specifically which one they are right now, but I do**
24 **recall reading it.**

25 **Q** You -- you recall reading that in connection with the

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1 Arizona case?

2 **A I don't know that I did necessarily with the Arizona**

3 **case, but with the Children's Health Defund --**

4 **Defense --**

5 **Q** Gotcha.

6 **A -- Children's Health Defense.**

7 **Q** Yeah. Then you relied or you cited a report created

8 by an organization called Isotope Wireless?

9 **A Yes, sir.**

10 **Q** And that was a study, I think, of electric meters and

11 water meters in three different homes in New York; is

12 that correct?

13 **A That sounds correct, yes.**

14 **Q** And in that particular environment with those

15 particular meters, Isotope determined that RF

16 emissions from smart meters' transmitting antennas

17 could be detected in different portions of those

18 homes, correct?

19 **A I believe so, yes.**

20 **Q** When you said in your report that the emissions from

21 the smart meters were well above ambient RF radiation

22 levels, what did you mean by the term ambient?

23 **A Ambient would be the surrounding areas.**

24 **Q** So --

25 **A Such that you -- if you took a reading, an ambient**

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1 **reading would be kind of a baseline reading.**

2 **Q** Okay. So if you're --

3 **A Go ahead.**

4 **Q** Oh, I'm sorry, I didn't mean to interrupt you, go

5 ahead.

6 **A I'm just trying to give you a -- my interpretation or**

7 **definition of ambient. Like if you want an ambient**

8 **temperature of something, you would take the**

9 **temperature of the room; that's -- that's the same**

10 **thing as -- or that's what ambient is.**

11 **Q** Okay. Well, in a situation where you're talking about

12 RF emissions being detectable at levels above ambient

13 RF radiation levels, is that -- am I correct in

14 understanding that that is simply saying that there

15 are different levels of RF emissions detectable within

16 a given room in a home?

17 **A Well, I would expect there could be, yes.**

18 **Q** Do you think that's what that's -- I mean, is that

19 what you intended to communicate by that sentence? So

20 let me ask you the question differently. I'm -- I'm

21 sure I'm being obtuse here, and I apologize.

22 I'm trying to understand whether, when you talk

23 about ambient RF levels, you're talking about in the

24 environment as a whole, throughout the house, or in

25 the room where the measurements are being conducted.

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1 So -- so I can't tell whether, for example, you mean

2 to say that the Isotope report found that there were

3 some measurable levels in a particular room of a house

4 that were greater than the RF levels outdoors, or

5 whether there were detectable levels in a given room

6 that were -- were different from the levels detected

7 in a different room, or if there were different levels

8 within a room.

9 Do you understand my confusion and what I'm

10 trying to get at?

11 **A Yeah, I understand what you're trying to ask, yes, and**

12 **I don't know that I can answer that for you. There**

13 **are -- there are probably different levels of ambient**

14 **to different areas, possibly.**

15 An ambient measurement is a measurement of what's

16 in the environment, and then whatever's above ambient

17 is something that's greater than what's in the

18 surrounding environment.

19 **Q** And so I guess that -- that -- maybe that puts a finer

20 point on my question. Is -- in the -- as the Isotope

21 report used that term, was the environment like the

22 world at large, was the environment the house, or was

23 the environment the room, or is it something else?

24 **A I don't know that. I mean, we could look at the**

25 **report and maybe they specify that, or maybe they**

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1 **don't; I don't know.**

2 **Q** All right. We'll do that later.

3 Would you have any basis for disputing the

4 finding made in connection with the Maine Public

5 Utilities Commission case that CMP smart meters

6 produce emissions significantly below the maximum

7 power density exposure levels as outlined by the

8 Federal Communications Commission?

9 **A I haven't looked into that. I don't know that I can**

10 **opine on that.**

11 **Q** And you understand -- are you familiar with the -- the

12 power density standards established by the FCC?

13 **A To a certain extent.**

14 **Q** Are you aware that they are established for continuous

15 exposure?

16 **A I would expect they are.**

17 **Q** Are you aware that the FCC regulations explicitly

18 permit emissions at levels which exceed 1 milliwatt

19 per square centimeter for shorter exposure times, so

20 long as they do not exceed that level if they're

21 averaged over 30 minutes?

22 **A I have no reason to doubt that.**

23 **Q** Just hold on one second, let me find a document, if I

24 can.

Have you ever conducted a study similar to the

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1 Isotope study to determine levels of radio frequency
2 signal within different parts of a residence?

3 **A No, I have not.**

4 **Q** Have you ever reviewed any similar studies?

5 **A Well, I may have. I don't recall specifically, but I**
6 **very well could have.**

7 **Q** You don't remember, though.

8 **A I don't remember off the top of my head, no.**

9 **Q** Do you know whether the Isotope study has been
10 replicated?

11 **A I don't know that, no.**

12 **Q** Do you know whether it can be replicated based on the
13 data contained in the report?

14 **A I have not tried to replicate it, and I don't know of**
15 **anybody who has.**

16 **Q** Do you know whether it can be replicated?

17 **A I would expect you can do that testing, yes. I'm sure**
18 **you can replicate the testing. I don't know if you**
19 **can replicate the data, but you can replicate the**
20 **testing, yes.**

21 MR. TAINTOR: I apologize, I somehow ended up in
22 this room without the Isotope report, and so I am
23 going to take about two minutes and go print off
24 another copy.

25 THE DEPONENT: All right.

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1 MR. TAINTOR: Apologize, I'll be right back.

2 THE DEPONENT: No problem.

3 (A brief break was taken followed by an
4 off-the-record discussion.)

5 BY MR. TAINTOR:

6 **Q** So I want to ask you about the Isotope report. Do
7 you have that in front of you?

8 **A Yes, sir, I do.**

9 **Q** Okay. So I want to just ask you, what -- to take a
10 look at Page 13 and ask you what this tells us
11 about --

12 **A Okay.**

13 **Q** -- about the measurements made by Isotope within the
14 various residences, I think three residences, in New
15 York where they measured radio frequency signal.

16 So are you -- first of all, do you see the table
17 there on Page 13?

18 **A Yes, sir, I do.**

19 **Q** Are these -- are the devices that are identified there
20 devices you're familiar with?

21 **A I certainly understand what a spectrum analyzer is. I**
22 **have not used the Hf35-c, but that -- that I'm not --**
23 **that I have not used.**

24 **Q** So where it talks about measurements -- so there are
25 -- there are two measurements for -- of exposure

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1 levels inside occupied spaces, one by spectrum
2 analyzer and one by this other device, the Hf35-c.

3 What do those -- what do those measurements mean?

4 What do they tell us about, for example, how the
5 exposure levels within those occupied spaces compare
6 to the FCC standards for radio frequency power
7 density?

8 **A I don't know that I can answer that for you. I can**
9 **see the measurements that they're giving, but I can't**
10 **quote you what the FCC standards are.**

11 **Q** I think -- as I recall, I -- I could be wrong, I think
12 it's one milliwatt per centimeter squared. If that's
13 -- if that's correct, how do these measurements
14 correspond or compare to that standard?

15 **A Well, it -- it appears from the chart that these are**
16 **given in decibel milliwatts per centimeter squared,**
17 **and then there's an asterisk that says that the use of**
18 **decibels makes it easier to present data over a wide**
19 **and variable range, the more negative the number, the**
20 **-- the dB, the weaker the signal, so that gives you a**
21 **-- at least some idea of the magnitude. But --**

22 **Q** Well, it -- it might give you an idea, but it doesn't
23 give me much of one, so I'm looking for your
24 explanation.

25 **A Well, what I'm saying is that -- and what they're --**

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1 **what they're stating in the report is that negative**
2 **20 dB_{mW} per centimeter squared is 1/100th of a**
3 **milliwatt per square meter, which they're saying is**
4 **.001 milliwatts per square centimeter.**

5 **Q** Okay.

6 **A So I mean, that's what they're giving in the report.**
7 **I have not converted watts per square centimeters to**
8 **decibels for -- decibel, you know, milliwatts per**
9 **centimeter squared.**

10 **Q** Okay. Would you -- would you characterize the power
11 densities described in Table 1 at Page 13 of the
12 Isotope report as intense exposures, as you use that
13 term in your report?

14 **A I haven't made that distinction, no.**

15 **Q** I'm sorry?

16 **A I haven't made that -- I have not come to that opinion**
17 **or analyzed it in that respect, no.**

18 **Q** And the reason I'm asking is I think if you go back to
19 -- and you don't necessarily need to open this up if
20 you don't want to, I'm sure you remember what it said
21 as you wrote that smart meters create intense exposure
22 to pulsed radio frequencies in a few ways, and then
23 one of those ways was by RF entering the house's
24 electrical system, and that's described at Pages 4 and
25 5 of your report, and you specifically cited the

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1 Isotrope report in support of that proposition.
 2 So what I'm trying to understand is whether, in
 3 fact, the Isotrope testing shows what you
 4 characterized in your report at Page 3 as intense
 5 exposures in other rooms of the house as a result of
 6 RF entering the house's electrical system.
 7 **A Well, I think this is definitely in support of that**
 8 **opinion in regards to they were able to find it in**
 9 **other parts of the house --**
 10 **Q Okay.**
 11 **A -- and that it shows that it does radiate into the**
 12 **house, and this was one of the ways that the RF gets**
 13 **into the house.**
 14 **Q Right. And what I'm trying --**
 15 **A The only other --**
 16 **Q -- to --**
 17 **A The only other ways are with the switch mode power**
 18 **supply, obviously, also --**
 19 **Q What I'm --**
 20 **A -- but this is one of the ways.**
 21 **Q What I'm trying to understand is whether the exposures**
 22 **described in Table 1 at Page 13 are exposures you**
 23 **would describe as intense.**
 24 **A I haven't come to that opinion.**
 25 **Q I'm sorry?**

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1 **A I have not come to that opinion at this time.**
 2 **Q Would you say they are not intense, as you use that**
 3 **term in your report?**
 4 **A Again, I -- I haven't -- I wouldn't take this data, in**
 5 **and of itself, to describe whether they're intense or**
 6 **not. I would have to take a closer look at that.**
 7 **Q Well, the Isotrope data is the only data you cited at**
 8 **Pages 4 and 5 of your report as support for the**
 9 **proposition that RF from wireless antennas enter the**
 10 **house's electrical system; would you agree with that?**
 11 **A That -- that's true, I -- those were the only cites I**
 12 **used. I could have cited many other things, but I**
 13 **only chose this one.**
 14 **Q Well, you say you could have cited many others, but I**
 15 **-- I asked you before whether you had performed**
 16 **similar testing and whether you were -- were aware of**
 17 **other testing similar to the Isotrope tests, and I --**
 18 **I thought you said you had not done any testing like**
 19 **that and you were not aware of any; am I wrong about**
 20 **that?**
 21 **A Well, you're just talking about the -- the tests from**
 22 **the equivalent plane wave, you know. There -- there**
 23 **are other RF frequencies that are distributed**
 24 **throughout the house and through the wiring that have**
 25 **been tested and I have cited in other areas, but this**

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1 **is just one of them that I cite for this particular**
 2 **instance. The -- the switch mode power supply creates**
 3 **RF and that is distributed throughout the house,**
 4 **also --**
 5 **Q Okay.**
 6 **A -- particularly when it's transmitting because when it**
 7 **transmits, it requires more power.**
 8 **Q Okay. There's a discussion in the Isotrope report of**
 9 **the phenomenon known as reradiation and, specifically,**
 10 **reradiation by appliances within a home; do you know**
 11 **what I'm talking about?**
 12 **A Yes, sir, I am.**
 13 **Q Just to be clear, that reradiation can never enhance**
 14 **or increase the RF signal, correct?**
 15 **A That's correct, that's my understanding.**
 16 **Q And the Isotrope report showed that reradiation**
 17 **occurred differently in different -- the three**
 18 **different houses that Isotrope studied, correct?**
 19 **A I would expect that's true.**
 20 **Q And why would you expect that's true?**
 21 **A Just by the various configuration of different houses.**
 22 **Q There's no indication in the Isotrope report, is**
 23 **there, that there was RF signal exceeding the FCC**
 24 **standard in any of the houses Isotrope studied?**
 25 **A I don't know that specifically, but I -- I have**

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1 **nothing to believe that it -- that it did not. I'd**
 2 **expect that it more than likely did.**
 3 **Q You expect, I'm sorry, you expect that there was RF**
 4 **signal exceeding FCC standards in these three houses?**
 5 **A No, I -- I expect that it did not exceed the FCC**
 6 **standard.**
 7 **Q Okay. And I want to ask you, I know we're getting**
 8 **fairly close to the time we need to finish up, but the**
 9 **-- the term dirty electricity is not a technical term,**
 10 **is it?**
 11 **A I would say it's probably not a very technical term.**
 12 **It's a descriptor.**
 13 **Q It's a descriptor of high-frequency voltage**
 14 **transients?**
 15 **A It can include that, yes.**
 16 **Q And what else does it include?**
 17 **A It can include harmonics; it can include electr --**
 18 **lightning; it can include -- it can include any number**
 19 **of things.**
 20 **Q Okay. And why -- what is, as a descriptor, what is it**
 21 **about the electricity that, in your mind, makes the**
 22 **adjective dirty an appropriate adjective to apply to**
 23 **electricity?**
 24 **A The fact that it's not clean; it's the opposite of**
 25 **clean, basically. If you have a clean sine wave of**

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1 60-hertz, when you look at it with a -- some type of
2 measuring or metering equipment, you'll see that it
3 has a nice clean line, it has nothing riding on it, it
4 has no spikes, or it's a -- it doesn't have any other
5 frequencies other than the 60-hertz signal.

6 So the opposite of that does have a number of
7 other signals on it or waveforms that are of high --
8 typically of a higher frequency that you can see on
9 the waveform, which causes the 60-hertz signal or the
10 60-hertz sine wave to become distorted. And so
11 instead of being a clean waveform, it becomes somewhat
12 less clean and distorted.

13 And, you know, a term that has been used is -- is
14 that it's a -- a dirty waveform.

15 Q As that term is used by yourself as an electrical
16 engineer, it has no connotation for human health,
17 correct?

18 A Not that I'm aware.

19 (Dogs barking.)

20 BY MR. TAINTOR:

21 Q Someone else -- someone else wants to ask questions
22 apparently.

23 A The dogs are like, come on, man, we've got to go here,
24 we're not -- we're not taking all day at this.

25 Q That's your -- that's your one o'clock -- two o'clock

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1 appointment I guess, huh?

2 A Yeah, right, every hour there's an appointment for
3 those dogs; they need a lot of attention.

4 Q I hear you.

5 So going back to, first of all, the -- the method
6 by which your report was drafted, were there initially
7 any citations in the report, or were those all added
8 either by others or at the suggestion of others?

9 A Well, some of the citations were part of the report
10 that was put together for the Children's Health
11 Defense, and -- and some of those citations then were
12 suggested by others, yes.

13 Q Okay.

14 A Yes.

15 Q And those others being either Mr. Friedman or his
16 counsel?

17 A Ah, I -- I don't know specifically if Mr. Friedman or
18 his coun -- I believe they did have some input as to
19 where to put citations in, yes, yeah.

20 Q What does it mean when you say in your report that
21 smart meters rely on AC for some of the nonelectronic
22 functions they perform?

23 A Well, I believe that -- that there may be some
24 electronic functions in there that are not necessarily
25 designed for the -- the radio frequency signaling. I

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1 haven't totally analyzed the circuit for the smart
2 meter, but part of what the AC is for is driving the
3 converter to cause it to go to DC, and I am not
4 specifically aware of which components may be run by
5 the AC portion of that, but there -- there may be
6 some.

7 Q Okay, thanks. Deposition Exhibit 13 is your up-to-
8 date, ordinarily up-to-date invoice for all the work
9 that you've done in connection with your -- this
10 lawsuit; is that correct?

11 A Yes, sir.

12 Q I take it you may have reviewed some materials in
13 preparation for today's deposition; is that right?

14 A Yes, sir, I have.

15 Q Exhibit 7 is an article from Forbes magazine about EMI
16 shielding technology.

17 Am I correct in assuming that that's included
18 just as a reference to essentially support your
19 statement that EMI shielding can be performed at
20 relatively modest cost?

21 A Yes, sir, it is.

22 Q Exhibit 11 is an article by William Bathgate from
23 October 2016, and Exhibit 5 is some testimony provided
24 by Mr. Bathgate in connection with a -- some
25 litigation in the state of Pennsylvania.

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1 Do you know Mr. Bathgate?

2 A No, sir, I do not.

3 Q Were these documents provided to you by Mr. Friedman?

4 A Either through him or through the Children's Defense.

5 Q Do you know which?

6 A It may have -- it may have been both; I don't know.

7 Q What significance, if any, did Mr. Bathgate's article,
8 Exhibit 7, have in you formulating your opinions in
9 this case?

10 A Which one was 7?

11 Q I'm sorry, 11, the --

12 A Or 11?

13 Q -- the article. It's called Electrical engineer: The
14 meter itself is the hazardous condition.

15 A I -- I think that had to do with grounding issues as
16 far as I was concerned --

17 Q Okay.

18 A -- or trying to mitigate the -- the effects of the
19 smart meter adversely affecting the 60-hertz sine
20 wave, and potentially grounding or some form of
21 limiting that with the help of grounding would --
22 would be appropriate or could be used as a way to
23 mitigate the amount of transients that were produced
24 on the system.

25 Q But you've not collaborated with Mr. Bathgate in any

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1 litigation before?

2 **A I have not.**

3 **Q** And what about Exhibit 5, his testimony, what -- what

4 was the significance of that in your -- forming your

5 opinions in this case?

6 **A From that testimony, I -- or that document, I think**

7 **mainly was that his testing showed that the -- the GE**

8 **or Alcara smart meter generated RF when it was**

9 **transmitting.**

10 **Q** Is that pretty much all that that testimony meant to

11 you in -- in formulating your opinions?

12 **A That was the gist of it, I think. I mean, there --**

13 **there are other things in there that I may or may not**

14 **agree with, but that -- that was what I believe I was**

15 **using it for.**

16 **Q** Okay. I'm just looking through your testimonial

17 history quickly, and it doesn't look like you've ever

18 testified in a court in Maine before; am I correct

19 about that?

20 **A I don't recall ever testifying in Maine.**

21 MR. TAINTOR: So it's 1:25. Let me do this. I

22 may be done. I'd just like to have a conversation

23 with my client, so I'm going to put myself on mute, go

24 into another room and have a quick call, and I'll be

25 back in about five minutes, and we can hopefully

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1 finish this up.

2 MR. LANSER: Sounds good.

3 (A break was taken from 1:27 p.m. to 1:34 p.m.)

4 BY MR. TAINTOR:

5 **Q** Mr. Anderson, are you ready to go?

6 **A Yes, sir.**

7 **Q** Finish up, at least for today for sure.

8 Has your testimony ever been excluded when it was

9 proffered by a party in a case, to your knowledge?

10 **A It has not that I know of.**

11 **Q** Do you know whether there have been motions to exclude

12 your testimony in any cases you've been involved in?

13 **A Oh, absolutely, yes.**

14 **Q** Are you able to identify, in particular by reference

15 to Exhibit 12, the cases in which motions of that kind

16 have been filed?

17 **A No, sir, I -- I do not.**

18 **Q** I just want to ask you a few questions about

19 Exhibit 13. It looks like your initial conversation

20 about the case was solely with Mr. Friedman and not

21 his counsel. Can you tell me what -- or would you

22 please tell me what you can recall about that

23 conversation?

24 **A I believe Mr. Friedman discussed with me what he was**

25 **looking for for an expert. He discussed that he was**

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1 **working to not have a smart meter on his house from**

2 **the power company there. I believe he discussed with**

3 **me that he was ill and that he felt that it was in his**

4 **best interest not to have a smart meter on his house.**

5 **I think those -- those were the pertinent issues.**

6 We may have discussed some of the individuals

7 that we knew about or that we had -- you know, I

8 believe he may have found my name through the work --

9 or the -- the Arizona case, I think we may have

10 discussed that a little bit.

11 **Q** Do you have notes of that conversation?

12 **A I believe I do, yes.**

13 **Q** It looks like on November 15th, you had another

14 conversation with Mr. Friedman that did not involve

15 his counsel. Do you recall what that discussion

16 entailed?

17 **A Yes, I believe we discussed the report and some of the**

18 **ways that we could maybe clean it up or be more**

19 **precise or flesh out some additional ideas, things**

20 **like that.**

21 **Q** All right. Do you have notes of that -- of that

22 conversation?

23 **A I believe I do, yeah.**

24 **Q** Were there any other phone conversations or Zoom

25 conversations that you recall having with Mr. Friedman

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1 that did not involve his counsel besides those two?

2 **A Yes, we had a discussion some time after this invoice**

3 **was sent to him.**

4 **Q** Okay. Was that about the invoice --

5 **A Yes, sir.**

6 **Q** -- or about --

7 **A Yes, sir, it was.**

8 **Q** Okay. Was he objecting to what you had charged?

9 **A Ah, I don't know if he was objecting or not. He**

10 **sounded -- he seemed a little shocked.**

11 **Q** Lawyers get that a lot, too, not just --

12 **A So I'm not -- I'm not the lone ranger here, huh?**

13 **Q** No, no, this is -- this is -- no, this is nice.

14 Do you have e-mail traffic with Mr. Friedman that

15 does not include his lawyers?

16 **A I -- I don't know; I may.**

17 MR. TAINTOR: If you -- I'd like to ask you to

18 produce the notes of your -- well, and, obviously,

19 Mr. Lanser's going to weigh in on this, but I'd like

20 to ask you to produce the notes of your two phone

21 calls with -- or -- or three phone calls with

22 Mr. Friedman, as well as any e-mail correspondence

23 that you may have had with him, and we'll figure that

24 out after this, and -- and I'll also look forward to

25 getting the, you know, the notes pertaining to the

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1 testing that was done with the fellow in Arizona whose
 2 name I can never remember -- Harding.
 3 And with that, I think we will leave it for
 4 today. So thank you very much for your time and go
 5 take your dogs for a walk.
 6 THE DEPONENT: Thank you, Chris, I appreciate it.
 7 MR. LANSEER: Chris, Chris, I do -- I do have some
 8 -- a few --
 9 MR. TAINTOR: Oh.
 10 MR. LANSEER: -- follow-up questions, if that's
 11 all right?
 12 MR. TAINTOR: Sure, oh, yeah.
 13 MR. LANSEER: Unless -- unless you are -- if we're
 14 certain he's coming back for more and you want to
 15 continue your direct, but I mean, without having seen
 16 the -- the notes, you know, I don't want to miss an
 17 opportunity to -- to clarify some things.
 18 MR. TAINTOR: Yeah, sure.
 19 MR. LANSEER: Great.
 20 EXAMINATION
 21 BY MR. LANSEER:
 22 Q So where was this here? So -- so speaking of the --
 23 the Paul Harding testing, I just wanted to clarify a
 24 couple things.
 25 I know with the second testing you did with
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1 Harding after this report was written, did that
 2 testing produce any contradictions to your original
 3 testing that the report was based off of?
 4 A **No, it did not.**
 5 Q Okay. If there had been any -- any differences,
 6 whether or not it was a true contradiction or
 7 anything, was there any differences you noticed
 8 between the testing previous to writing the report and
 9 the testing after you wrote the report?
 10 A **No, I don't believe so.**
 11 Q Okay. If it had produced any contradictions or there
 12 had been any differences in the -- in -- in the
 13 testing, is that something you would have included in
 14 an update to the report?
 15 A **Well, I don't know if I would have or not, but we**
 16 **certainly would have discussed it here I'm sure.**
 17 Q But there weren't any differences, so we didn't get to
 18 that, you didn't have to make that decision of whether
 19 or not to update your report, the -- the testing was
 20 substantively the same?
 21 A **That's correct, yes.**
 22 Q Okay. And also regarding the report itself, you said
 23 a little bit ago that Mr. Friedman or his counsel had
 24 -- I think your -- and I don't know if I have the
 25 exact language right, but I think it was something
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1 along the lines of you said they had some input on
 2 where to put citations; does that sound like your
 3 testimony?
 4 A **Yes.**
 5 Q Did that input -- did that include which specific
 6 documents to cite to or just suggestions, you know,
 7 that a citation could be helpful?
 8 A **A suggestion that you could maybe cite the document at**
 9 **this location or another location or something like**
 10 **that.**
 11 Q Okay. And one other clarification from earlier, there
 12 was some discussion regarding other appliances or
 13 devices that also create transients, correct?
 14 A **That's correct, yes.**
 15 Q All right. Is there any difference in the manner in
 16 which transients are created or -- or are transmitted
 17 between those devices and smart meters?
 18 A **Is there a difference between the way they're**
 19 **transmitted? Well, the -- the transients that are**
 20 **transmitted by the smart meters are throughout the**
 21 **entire house, basically. Those that are transmitted**
 22 **by devices are typically more at the source of the**
 23 **device, although some of that also can be on the**
 24 **entire electrical system.**
 25 Q Okay. And is there a difference in that context
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1 between, I think, what -- what's referred to in -- in
 2 reports as linear versus nonlinear?
 3 A **Linear and nonlinear what?**
 4 Q Let me see if I have this language. I believe I saw
 5 somewhere -- I'm sorry, I should have done this. I
 6 don't have the exact language in front of me, but I
 7 recall some discussion about linear versus nonlinear
 8 transmissions. Does that ring a bell at all? I might
 9 be off-base.
 10 A **I don't -- I don't recall that.**
 11 Q Okay. Do you know of any -- is there a -- is there
 12 any manner in which an individual could turn off their
 13 -- the emissions from their smart meter at the -- at
 14 the source in their home?
 15 A **That -- not that I'm aware of.**
 16 Q Okay. And what about for other devices, is there any
 17 way to shield or turn off those transients?
 18 A **Yes, you can control those and determine whether you**
 19 **want to use them or not or if you want to filter out**
 20 **their RF or transients.**
 21 Q Okay. So that's one difference between some of the
 22 other appliances you discussed and the smart meters is
 23 that with those other appliances, you can -- you can
 24 control the effect of those emissions or the amount of
 25 those emissions in your home, but smart meters you
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1 cannot; is that fair to say?

2 **A Yes, that's correct.**

3 MR. LANSER: All right. I think that's all the
4 -- the follow-up I have right now.

5 MR. TAINTOR: Okay. So I -- I probably should
6 follow up on a couple things then.

7 EXAMINATION

8 BY MR. TAINTOR:

9 **Q** So, Mr. Anderson, I'm sure I'll paraphrase this wrong,
10 but I think -- what I thought I heard you say in
11 response to one of Mr. Lanser's questions was that
12 there is -- one of the distinctions between transients
13 created by a smart meter and transients created by
14 appliances is that the transients generated by the
15 smart meters propagate throughout the house, whereas
16 the transients prop -- generated by the -- the
17 appliances sort of remain in proximity to the
18 appliances; did I understand you correctly?
19 **A Not completely, no. I mean, other devices in the**
20 **house cause transients on the system also, but the RF**
21 **generators, like through your monitor or something, is**
22 **at the monitor for the most part other than the**
23 **switching transients that are potentially in the -- in**
24 **the power supply of that type of device, or you can --**
25 **you can mitigate those transients at the source, at**

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1 **the source of the appliance, such that it does not**
2 **propagate throughout the rest of the house.**

3 So there -- there is either a choice of not using
4 that appliance, or whatever, if you believe it is
5 causing harmful effects to you or to try and mitigate
6 the effects of that appliance at the appliance or get
7 a different type of appliance-type thing.

8 It's similar to when you have surge suppression
9 on a -- well, it's a relocatable power tap or an
10 outlet strip is what it's commonly called type of
11 thing. Those are the kinds of things that you can do
12 inside your house that is more, oh, onerous or
13 difficult to do with a smart meter given its current
14 configuration.

15 **Q** Focusing on the issue of the transients, is another --
16 another word for transients noise? Is that a -- a
17 term that elec -- electrical engineers use to describe
18 these transients?

19 **A Yes, that -- that is something that you can -- another**
20 **way to describe it. Noise can be something like**
21 **that's always present on your system, causing it to be**
22 **what they would call a noisy system.**

23 Transients, by definition, are something that are
24 very short in duration and time, and that's why you
25 call it a transient --

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1 **Q** Gotcha.

2 **A -- because it only shows up for a very short period of**
3 **time. The -- the spike on -- on the waveform rises**
4 **very quickly and then goes -- you know, decreases very**
5 **quickly, and it's just a short little spike transient**
6 **which causes -- you know, if you get multitudes of**
7 **those, then they have a specific frequency that**
8 **they're associated with --**

9 **Q** Okay.

10 **A -- so --**

11 **Q** So I shouldn't have taken us down that side road, I
12 didn't mean to, but what I thought I understood you to
13 say from your previous testimony when I was asking you
14 questions before was that once the transients are on
15 the system from the -- once they're created by the
16 smart meter, they stay on the system as the wave
17 propagates throughout the house; is that true?

18 **A That's correct, those transients are throughout the**
19 **house on the system, yes.**

20 **Q** And would that also be true for the transients created
21 by the appliances?

22 **A To a certain extent, but they're at the load end. So**
23 **you can -- you can look at it like those transients**
24 **are created at that location and they're reflected**
25 **back onto the system, there's no doubt about that, but**

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1 **at that -- they're at the -- they're where the power's**
2 **being utilized and they're transmitting at that**
3 **location, and it's going no further than that, they're**
4 **not going further downstream --**

5 **Q** Hm-hmm.

6 **A -- basically. But, yes, they're -- those transients**
7 **are on the system, also.**

8 **Q** But once they're reflected back, again, I'm going to
9 display my ignorance to this stuff, but once they're
10 reflected back into the system, don't they travel
11 throughout the system in the house's wiring system?

12 **A To a certain extent, they do, yes.**

13 **Q** And then the -- the mitigation measures that you're
14 talking about that you can use for appliances, for
15 example, include things like surge suppressors you
16 said?

17 **A Yes, sir.**

18 **Q** Anything else in particular that you had mentioned?

19 **A You can -- well, the surge suppression is all**
20 **encompassing. So there's different ways to perform**
21 **surge suppression.**

22 **Q** Okay. So even though that's a term we might use for
23 that -- the power strip, it's actually a broader term.

24 **A Surge suppression is a much broader term, and there**
25 **are many ways to suppress surges, yes.**

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1 MR. TAINTOR: Gotcha, okay. All right. Thank
 2 you very much for your time, sir.
 3 THE DEPONENT: Thank you, Chris, I really
 4 appreciate it.
 5 MR. TAINTOR: Are you all set, Dave?
 6 MR. LANSER: Yep, all set over here, thanks.
 7 MR. TAINTOR: Great, I'll just look forward to
 8 getting that information from you, Mr. Anderson, and
 9 we can figure out whether we have to come back another
 10 day, hopefully not.
 11 THE DEPONENT: All right, great.
 12 (The deposition concluded at 1:54 p.m.)

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2 I, ERIK S. ANDERSON, P.E., have read the
 3 foregoing pages of my transcript or have had the
 4 foregoing pages of my testimony read to me and have
 5 noted any changes in form or substance of my
 6 testimony, together with their respective corrections
 7 and the reasons therefore, on the following errata
 8 sheet(s).

ERIK S. ANDERSON, P.E.

(Date)

TO BE COMPLETED BY NOTARY PUBLIC OR ATTORNEY:

I, _____, a Notary
 Public/Attorney in and for the State of Maine, hereby
 acknowledge that the above-named witness personally
 appeared before me, swore to the truth of the
 foregoing statements and affixed his/her signature
 above as his/her true act and deed.

(Date)

My Commission Expires:

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1 CERTIFICATE
 2 I, Julie G. Edgecomb, a Notary Public in and for
 3 the State of Maine, hereby certify that the within-in
 4 named deponent was sworn to testify the truth, the
 5 whole truth, and nothing but the truth, in the
 6 aforementioned cause of action.
 7 I further certify that this deposition was
 8 stenographically reported by me and later reduced to
 9 print through Computer-Aided Transcription, and the
 10 foregoing is a full and true record of the testimony
 11 given by the deponent.
 12 I further certify that I am a disinterested
 13 person in the event or outcome of the above-named
 14 cause of action.
 15 IN WITNESS WHEREOF, I subscribe my hand this
 16 8th day of February, 2022. Dated at Brewer, Maine.
 17
 18
 19
 20 /s/ Julie G. Edgecomb
 Notary Public
 21
 22 My Commission Expires
 23 July 19, 2023.

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7 February 8, 2022

8
9 Re: ED FRIEDMAN v. CENTRAL MAINE POWER COMPANY
10 Deposition of: ERIK S. ANDERSON, P.E.

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12 Enclosed please find a copy of your deposition taken
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